

TARGETED TUBERCULOSIS SCREENING GUIDELINES WYOMING DEPARTMENT OF HEALTH NOVEMBER 2010

The overriding objectives of screening for Mycobacterium tuberculosis (TB) should be to identify *persons who are at high risk for TB exposure and infection*, and *persons at high risk for active TB disease once infected*. Targeting screening to populations who are likely to fall into these two broad categories is now the standard approach in the U.S., and is referred to as *targeted screening*. The type of screening may vary, and may include a tuberculin-skin test (TST), interferon gamma release assay (IGRA), or chest radiograph, depending on the situation.

The Wyoming Department of Health (WDH) recommends that targeted screening for TB infection and disease be considered among persons in the following groups:

- Close contacts of persons known or suspected to have TB disease (consultation with public health officials is recommended).
- Foreign-born persons, including children, from areas that have a high TB incidence or prevalence. (e.g., Latin America and the Caribbean, Africa, Asia, Eastern Europe, and Russia)
- Residents and employees of high-risk congregate settings, such as correctional institutions, long term care
 facilities, mental health institutions, child care facilities and shelters for homeless. These facilities should
 have protocols in place that define their TB screening policies. (see *Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Healthcare Settings*, 2005, MMWR, Dec 30, 2005.).
- Healthcare workers who serve high risk clients, or who work in facilities for which an assessment of risk indicates the need for routine TB testing (see *Guidelines for Preventing the Transmission of Mycobacterium tuberculosis in Healthcare Settings*, 2005, MMWR, Dec 30, 2005.).
- High risk racial or ethnic minority populations, defined locally as having an increased prevalence of TB.
- Persons who use illicit drugs.
- Infants, children, and adolescents who are frequently exposed to adults at high risk for TB infection.
- Infants, children, and adolescents with travel histories to countries with endemic infection and having had substantial contact with native people from such countries.
- Persons with a history of inadequately treated TB infection (TST may not be an appropriate screening method for these persons).
- Travelers who anticipate possible prolonged exposure to TB (e.g., those who could be expected to come in contact routinely with hospital, prison, or homeless shelter populations) or those who may have an extended stay over a period of years in an endemic country. (e.g., Latin America and the Caribbean, Africa, Asia, Eastern Europe, and Russia). If the result is negative, travelers should have a repeat test approximately 8-10 weeks after returing.
- Persons who have medical conditions known to increase the risk for active disease if infection occurs.
 Includes:
 - HIV infection
 - Substance abuse
 - Chest radiograph findings suggestive of previous TB infection in a person who received inadequate or no treatment
 - o Diabetes mellitus
 - Silicosis
 - Prolonged corticosteroid use
 - Other immunosuppressive therapy
 - Cancer of head and neck, or lung
 - Hematologic/reticuloendothelial disease
 - Chronic renal failure/end-stage renal disease
 - Intestinal bypass or gastrectomy
 - Chronic malabsorption syndromes
 - Low body weight (10% or more below ideal body weight)
 - Organ transplant

Note: WDH acknowledges that the decision to screen for TB infection and disease in an individual is influenced by numerous factors, including clinical circumstances, and that clinical judgment by the healthcare provider is a critical component of the decision making process. These guidelines should not be interpreted as directing the clinical care and testing of an individual patient for whom TB infection or disease is considered a possibility by a healthcare provider.

TUBERCULOSIS (TB) SCREENING GUIDELINES FOR CHILD CARE FACILITIES STAFF

All employees and volunteers of public and private day care centers must show that they are free of communicable tuberculosis. The Wyoming Department of Health (WDH) recommends screening of daycare center employees as follows:

Screening for TB infection (TST/IGRA/CXR) should be performed on all adults who have contact with children in a child care setting before caregiving activities are initiated, including non- care providers present in family child care homes. The need for subsequent periodic screening of adults with negative tests and no symptoms should be based on the person's risk of acquiring infection (no requirement for subsequent screenings based solely on working in child care). If screening is postive, then active disease must be ruled out before beginning work. If active disease is present, the prospective worker must be excluded from working in child care until therapy has rendered them non-infectious.

WHO	SCREENING PROCEDURE	FREQUENCY OF SCREENING
New employees New volunteers	Intradermal skin test* (Mantoux PPD)/IGRA and/or Chest X-ray	Within 60 days prior to employment
Ongoing employees and Ongoing volunteers with negative skin test	No further screening needed, except if employee has additional risk factors.**	If patient has additional risk factors patient should be screened every year**
Ongoing employees and Ongoing volunteers with positive skin test and negative chest X- ray	No further screening needed, except symptom screen recommended each year. Referral to healthcare provider for assessment of treatment of latent infection.	Symptom Screening recommended each year

^{*}For initial screening, when a skin test result is positive, a chest x-ray is required.

References:

American Academy of Pediatrics. Red Book. 28th edition. 2009.

American Thoracic Society. Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection. Am J Respir Crit Care Med. 161:S221-247.

Centers for Disease Control and Prevention. 2005. Controlling Tuberculosis in the United States. MMWR. 54 (RR-12).

CDC Health Infromation for International Travel 2008.

Core Curriculum on Tuberculosis. Centers for Disease Control and Prevention.

^{**}Please complete a TB risk assessment form available online at http://wdh.state.wy.us/PHSD/tb/index.html